```
=> s acinetobacter
 L1
           4206 ACINETOBACTER
 => s prion?
 L2
           5104 PRION?
 => s (antibod? or antiser?)
         634056 ANTIBOD?
          54454 ANTISER?
 L3
         662896 (ANTIBOD? OR ANTISER?)
 => s (myelin or myelin neurofilament?)
          25414 MYELIN
          25414 MYELIN
           6639 NEUROFILAMENT?
              1 MYELIN NEUROFILAMENT?
                   (MYELIN (W) NEUROFILAMENT?)
 L4
          25414 (MYELIN OR MYELIN NEUROFILAMENT?)
 => s autoimmun?
 L5
          69166 AUTOIMMUN?
 => s (spongiform or demyelinating)
           3387 SPONGIFORM
          10627 DEMYELINATING
          13982 (SPONGIFORM OR DEMYELINATING)
 L6
 => s (ms or multiple sclerosis)
          64130 MS
         375554 MULTIPLE
          54470 SCLEROSIS
          26374 MULTIPLE SCLEROSIS
                  (MULTIPLE (W) SCLEROSIS)
L7
          81954 (MS OR MULTIPLE SCLEROSIS)
 => s (cjd or creutzfeld jacob disease)
           1176 CJD
            158 CREUTZFELD
            638 JACOB
        1452095 DISEASE
             20 CREUTZFELD JACOB DISEASE
                  (CREUTZFELD (W) JACOB (W) DISEASE)
rac{1}{8}
           1193 (CJD OR CREUTZFELD JACOB DISEASE)
=> s l1 and l2 and l3 and l4 and l5 and l6 and l7
              0 L1 AND L2 AND L3 AND L4 AND L5 AND L6 AND L7
=> s 11 and 12
L10
              3 L1 AND L2
=> s 110 and 13
L11
              2 L10 AND L3
=> d l11 1-2 bib ab
L11 ANSWER 1 OF 2
                        MEDLINE
AN
     2002627378
                     MEDLINE
DN
     22272992
                PubMed ID: 12383651
ΤI
     Failure to demonstrate involvement of antibodies to
     Acinetobacter calcoaceticus in transmissible spongiform
     encephalopathies of animals.
     Nielsen K; Widdison J; Balachandran A; Stevenson D; Algire J
ΑU
     Animal Diseases Research Institute, Canadian Food Inspection Agency, 3851
CS
     Fallowfield Road, Nepean, Ont, Canada K2H 8P9.. nielsenk@inspection.gc.ca
```

- SO VETERINARY IMMUNOLOGY AND IMMUNOPATHOLOGY, (2002 Oct 28) 89 (3-4) 197-205. Journal code: 8002006. ISSN: 0165-2427.
- CY Netherlands
- DT Journal; Article; (JOURNAL ARTICLE)
- LA English
- FS Priority Journals
- EM 200301
- ED Entered STN: 20021018

Last Updated on STN: 20030125 Entered Medline: 20030124

AB Acinetobacter calcoaceticus, a soil microbe, contains molecular sequences which resemble those found in neurofilaments of the brain tissue. It was hypothesized that if cattle ingest large amounts of feedstuff containing A. calcoaceticus, they may develop an autoimmune reaction, with consequences of pathological changes associated with transmissible spongiform encephalopathies (TSEs). The hypothesis was tested using a small number of serum samples collected from cattle and it was found that affected individuals had elevated serum antibody levels to this organism. If this finding was substantiated, it would provide a possible means of diagnosing TSEs in vivo. In the present communication, a larger number of cattle, elk and sheep with or without TSEs were tested using A. calcoaceticus whole cell and lipopolysaccharide antigens as well as myelin basic protein (MBP). It was found that antibody levels in normal and affected animals overlapped considerably, thus casting doubt on the usefulness of these antigens as diagnostic tools for TSEs and on the hypothesis of A. calcoaceticus being a cause of TSEs.

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- L11 ANSWER 2 OF 2 MEDLINE
- AN 2000038326 MEDLINE
- DN 20038326 PubMed ID: 10569779
- TI Autoantibodies to brain components and **antibodies** to **Acinetobacter** calcoaceticus are present in bovine spongiform encephalopathy.
- AU Tiwana H; Wilson C; Pirt J; Cartmell W; Ebringer A
- CS Infection and Immunity Group, Division of Life Sciences, King's College, London, United Kingdom.
- SO INFECTION AND IMMUNITY, (1999 Dec) 67 (12) 6591-5. Journal code: 0246127. ISSN: 0019-9567.
- CY United States
- DT Journal; Article; (JOURNAL ARTICLE)
- LA English
- FS Priority Journals
- EM 199912
- ED Entered STN: 20000113

Last Updated on STN: 20000113

Entered Medline: 19991220

AB Bovine spongiform encephalopathy (BSE) is a neurological disorder, predominantly of British cattle, which belongs to the group of transmissible spongiform encephalopathies together with Creutzfeldt-Jakob disease (CJD), kuru, and scrapie. Autoantibodies to brain neurofilaments have been previously described in patients with CJD and kuru and in sheep affected by scrapie. Spongiform-like changes have also been observed in chronic experimental allergic encephalomyelitis, at least in rabbits and guinea pigs, and in these conditions autoantibodies to myelin occur. We report here that animals with BSE have elevated levels of immunoglobulin A autoantibodies to brain components, i.e., neurofilaments (P < 0.001) and myelin (P < 0.001), as well as to Acinetobacter calcoaceticus (P < 0.001), saprophytic microbes found in soil which have sequences cross-reacting with bovine neurofilaments and myelin, but there were no antibody elevations against Agrobacterium tumefaciens or Escherichia coli. The relevance of such mucosal autoantibodies or antibacterial antibodies to the pathology of BSE and its

possible link to prions requires further evaluation.

=> s l1 and l4 L12 5 L1 AND L4

=> d l12 1-5 bib ab

L12 ANSWER 1 OF 5 MEDLINE

AN 2002627378 MEDLINE

DN 22272992 PubMed ID: 12383651

TI Failure to demonstrate involvement of antibodies to Acinetobacter calcoaceticus in transmissible spongiform encephalopathies of animals.

AU Nielsen K; Widdison J; Balachandran A; Stevenson D; Algire J

CS Animal Diseases Research Institute, Canadian Food Inspection Agency, 3851 Fallowfield Road, Nepean, Ont, Canada K2H 8P9.. nielsenk@inspection.gc.ca

VETERINARY IMMUNOLOGY AND IMMUNOPATHOLOGY, (2002 Oct 28) 89 (3-4) 197-205. Journal code: 8002006. ISSN: 0165-2427.

CY Netherlands

DT Journal; Article; (JOURNAL ARTICLE)

LA English

FS Priority Journals

EM 200301

ED Entered STN: 20021018
Last Updated on STN: 20030125
Entered Medline: 20030124

AB Acinetobacter calcoaceticus, a soil microbe, contains molecular sequences which resemble those found in neurofilaments of the brain tissue. It was hypothesized that if cattle ingest large amounts of feedstuff containing A. calcoaceticus, they may develop an autoimmune reaction, with consequences of pathological changes associated with transmissible spongiform encephalopathies (TSEs). The hypothesis was tested using a small number of serum samples collected from cattle and it was found that affected individuals had elevated serum antibody levels to this organism. If this finding was substantiated, it would provide a possible means of diagnosing TSEs in vivo. In the present communication, a larger number of cattle, elk and sheep with or without TSEs were tested using A. calcoaceticus whole cell and lipopolysaccharide antigens as well as myelin basic protein (MBP). It was found that antibody levels in normal and affected animals overlapped considerably, thus casting doubt on the usefulness of these antigens as diagnostic tools for TSEs and on the hypothesis of A. calcoaceticus being a cause of TSEs. Copyright 2002 Elsevier Science B.V.

L12 ANSWER 2 OF 5 MEDLINE

AN 2001638734 MEDLINE

DN 21546642 PubMed ID: 11687461

TI Antibody responses to Acinetobacter spp. and Pseudomonas aeruginosa in multiple sclerosis: prospects for diagnosis using the myelin-acinetobacter-neurofilament antibody index.

AU Hughes L E; Bonell S; Natt R S; Wilson C; Tiwana H; Ebringer A; Cunningham P; Chamoun V; Thompson E J; Croker J; Vowles J

CS Infection and Immunity Group, Division of Life Sciences, King's College London, London, United Kingdom.

SO CLINICAL AND DIAGNOSTIC LABORATORY IMMUNOLOGY, (2001 Nov) 8 (6) 1181-8. Journal code: 9421292. ISSN: 1071-412X.

CY United States

DT Journal; Article; (JOURNAL ARTICLE)

LA English

FS Priority Journals

EM 200201

ED Entered STN: 20011107

Last Updated on STN: 20020128 Entered Medline: 20020125

- Antibody responses to Acinetobacter (five strains), Pseudomonas aeruginosa, Escherichia coli, myelin basic protein (MBP), and neurofilaments were measured in sera from 26 multiple sclerosis (MS) patients, 20 patients with cerebrovascular accidents (CVA), 10 patients with viral encephalitis, and 25 healthy blood donors. In MS patients, elevated levels of antibodies against all strains of Acinetobacter tested were present, as well as antibodies against P. aeruginosa, MBP, and neurofilaments, but not antibodies to E. coli, compared to the CVA group and controls. The myelin-Acinetobacter-neurofilament antibody index appears to distinguish MS patients from patients with CVAs or healthy controls. The relevance of such antibodies to the neuropathology of MS requires further evaluation.
- L12 ANSWER 3 OF 5 MEDLINE
- AN 2000038326 MEDLINE
- DN 20038326 PubMed ID: 10569779
- TI Autoantibodies to brain components and antibodies to Acinetobacter calcoaceticus are present in bovine spongiform encephalopathy.
- AU Tiwana H; Wilson C; Pirt J; Cartmell W; Ebringer A
- CS Infection and Immunity Group, Division of Life Sciences, King's College, London, United Kingdom.
- SO INFECTION AND IMMUNITY, (1999 Dec) 67 (12) 6591-5. Journal code: 0246127. ISSN: 0019-9567.
- CY United States
- DT Journal; Article; (JOURNAL ARTICLE)
- LA English
- FS Priority Journals
- EM 199912
- ED Entered STN: 20000113 Last Updated on STN: 20000113
- Entered Medline: 19991220

 AB Bovine spongiform encephalopathy (BSE) is a neurological disorder, predominantly of British cattle, which belongs to the group of transmissible spongiform encephalopathies together with Creutzfeldt-Jakob disease (CJD), kuru, and scrapie. Autoantibodies to brain neurofilaments have been previously described in patients with CJD and kuru and in affected by scrapie. Spongiform-like shanges have also kuru abd in screen affected by scrapie.

affected by scrapie. Spongiform-like changes have also been observed in chronic experimental allergic encephalomyelitis, at least in rabbits and guinea pigs, and in these conditions autoantibodies to myelin occur. We report here that animals with BSE have elevated levels of immunoglobulin A autoantibodies to brain components, i.e., neurofilaments (P < 0.001) and myelin (P < 0.001), as well as to

Acinetobacter calcoaceticus (P < 0.001), saprophytic microbes found in soil which have sequences cross-reacting with bovine neurofilaments and myelin, but there were no antibody elevations against Agrobacterium tumefaciens or Escherichia coli. The relevance of such mucosal autoantibodies or antibacterial antibodies to the pathology of BSE and its possible link to prions requires further evaluation.

- L12 ANSWER 4 OF 5 MEDLINE
- AN 1998039091 MEDLINE
- DN 98039091 PubMed ID: 9370514
- Bovine spongiform encephalopathy: is it an autoimmune disease due to bacteria showing molecular mimicry with brain antigens?.
- AU Ebringer A; Thorpe C; Pirt J; Wilson C; Cunningham P; Ettelaie C
- CS Division of Life Sciences, Infection and Immunity Group and Department of Computing, King's College, Campden Hill Road, London, United Kingdom.
- SO ENVIRONMENTAL HEALTH PERSPECTIVES, (1997 Nov) 105 (11) 1172-4. Journal code: 0330411. ISSN: 0091-6765.
- CY United States
- DT Journal; Article; (JOURNAL ARTICLE)
- LA English
- FS Priority Journals
- EM 199801

ED Entered STN: 19980129 Last Updated on STN: 19980129 Entered Medline: 19980115

Bovine spongiform encephalopathy (BSE) could be an autoimmune disease produced following exposure of cattle to feedstuffs containing bacteria showing molecular mimicry between bacterial components and bovine tissue. Analysis of molecular sequence databases (Genbank and SwissProt) shows that three bacteria (Acinetobacter calcoaceticus, Ruminococcus albus, and Agrobacter tumefaciens) share sequences with the encephalitogenic peptide of bovine myelin, while three molecules in Escherichia coli show molecular mimicry with host-encoded prion protein. Immune responses against these bacteria at both T and B cell levels may cause neurological tissue injury resembling BSE. The role of these bacteria in BSE, if any, merits further investigation.

L12 ANSWER 5 OF 5 MEDLINE AN 86128537 MEDLINE

DN 86128537 PubMed ID: 3004271

TI Colloidal gold immunoultrastructural localization of rat surfactant.

AU Coalson J J; Winter V T; Martin H M; King R J

NC HL-16725 (NHLBI) HL-23578 (NHLBI)

SO AMERICAN REVIEW OF RESPIRATORY DISEASE, (1986 Feb) 133 (2) 230-7. Journal code: 0370523. ISSN: 0003-0805.

CY United States

DT Journal; Article; (JOURNAL ARTICLE)

LA English

FS Abridged Index Medicus Journals; Priority Journals

EM 198603

ED Entered STN: 19900321 Last Updated on STN: 19970203 Entered Medline: 19860310

Using a polyclonal antiserum against the nonserum proteins in purified rat AB surfactant, we have localized protein antigen within the lamellar bodies of rat alveolar Type II cells perfusion-fixed with 2% cacodylate-buffered paraformaldehyde and postfixed with 0.5% osmium. A postembedment indirect immunogold ultrastructural localization was used and 20 nm gold particles were localized over the lamellae in Type II cell lamellar bodies, in tubular myelin, and in some of the secondary lysosomes of alveolar macrophages. Occasional labeling was seen in the rough endoplasmic reticulum and multivesicular bodies in some Type II cells, but the amount of this staining was not different from nonspecific background. There was, however, an invariant lack of labeling over all other lung cell types. These results demonstrate the presence of surfactant proteins within the lamellar body secretory product and support the idea that the surfactant lipoprotein complex is formed within intracellular sites prior to its secretion into the alveolar space.

=> s 13 and 14 L13 4339 L3 AND L4 => s 113 and 15 L14 1114 L13 AND L5 => s 114 and 11 L15 1 L14 AND L1 => d 115 ab bib

L15 ANSWER 1 OF 1 MEDLINE

AB Acinetobacter calcoaceticus, a soil microbe, contains molecular sequences which resemble those found in neurofilaments of the brain tissue. It was hypothesized that if cattle ingest large amounts of

feedstuff containing A. calcoaceticus, they may develop an autoimmune reaction, with consequences of pathological changes associated with transmissible spongiform encephalopathies (TSEs). hypothesis was tested using a small number of serum samples collected from cattle and it was found that affected individuals had elevated serum antibody levels to this organism. If this finding was substantiated, it would provide a possible means of diagnosing TSEs in vivo. In the present communication, a larger number of cattle, elk and sheep with or without TSEs were tested using A. calcoaceticus whole cell and lipopolysaccharide antigens as well as myelin basic protein (MBP). It was found that antibody levels in normal and affected animals overlapped considerably, thus casting doubt on the usefulness of these antigens as diagnostic tools for TSEs and on the hypothesis of A. calcoaceticus being a cause of TSEs.

Copyright 2002 Elsevier Science B.V.

- AN 2002627378 MEDLINE
- PubMed ID: 12383651 DN 22272992
- Failure to demonstrate involvement of antibodies to TI Acinetobacter calcoaceticus in transmissible spongiform encephalopathies of animals.
- ΑU Nielsen K; Widdison J; Balachandran A; Stevenson D; Algire J
- CS Animal Diseases Research Institute, Canadian Food Inspection Agency, 3851 Fallowfield Road, Nepean, Ont, Canada K2H 8P9.. nielsenk@inspection.gc.ca
- SO VETERINARY IMMUNOLOGY AND IMMUNOPATHOLOGY, (2002 Oct 28) 89 (3-4) 197-205. Journal code: 8002006. ISSN: 0165-2427.
- CY Netherlands
- DTJournal; Article; (JOURNAL ARTICLE)
- LA English
- FS Priority Journals
- EM200301
- Entered STN: 20021018 ED

Last Updated on STN: 20030125 Entered Medline: 20030124

- L9 ANSWER 1 OF 2 MEDLINE
- AN 2003213543 IN-PROCESS
- DN 22620105 PubMed ID: 12734891
- TI Cytotoxicity responses to Peptide antigens in rheumatoid arthritis and ankylosing spondylitis.
- AU Wilson Clyde; Rashid Taha; Tiwana Harmale; Beyan Huryia; Hughes Lucy; Bansal Sukvinder; Ebringer Alan; Binder Allen
- CS Division of Life Sciences, Infection and Immunity Group, King's College London, London, England.
- SO JOURNAL OF RHEUMATOLOGY, (2003 May) 30 (5) 972-8. Journal code: 7501984. ISSN: 0315-162X.
- CY Canada
- DT Journal; Article; (JOURNAL ARTICLE)
- LA English
- FS IN-PROCESS; NONINDEXED; Priority Journals
- ED Entered STN: 20030508
 - Last Updated on STN: 20030508
- AB OBJECTIVE: To measure levels of IgG antibodies against structurally related synthetic peptides of HLA-DRB1*0404, type XI collagen, and Proteus mirabilis in patients with rheumatoid arthritis (RA) and HLA-B*2705 and Klebsiella pneumoniae in patients with ankylosing spondylitis (AS), and to determine whether sera from RA and AS patients are cytotoxic for sheep red blood cells (SRBC) coated with HLA-DRB1*0404, type XI collagen, or HLA-B*2705. METHODS: Sera from 51 patients with RA, 34 with AS, and 38 healthy controls were tested against synthetic EQRRAA, ESRRAL, LRREI, and IRRET peptides by ELISA. Sera from patients and controls were also tested for reactivity in complement mediated cytotoxicity with SRBC coated with EQRRAA and HLA-B*2705, LRREI peptides. RESULTS: Antibodies to synthetic peptides containing EQRRAA, ESRRAL, LRREI, and IRRET were significantly increased in RA patients compared with AS patients (p < 0.001) and controls (p < 0.001). The percentage lysis data for SRBC coated with EQRRAA and LRREI peptides were significantly higher for RA sera (p < 0.001) compared to control sera. Percentage lysis for SRBC coated with HLA-B*2705 peptide was significantly higher for AS sera (p < 0.001) compared to control sera. CONCLUSION: Our results suggest that antibodies against antigenic determinants of P. mirabilis in RA and K. pneumoniae in AS have cytotoxic properties on structurally related host proteins. These cytotoxic antibodies together with T cell interactions could be relevant in the etiopathogenesis of RA and AS.
- L9 ANSWER 2 OF 2 MEDLINE
- AN 2003121916 MEDLINE
- DN 22522610 PubMed ID: 12635939
- TI Rheumatoid arthritis: proposal for the use of anti-microbial therapy in early cases.
- AU Ebringer Alan; Rashid Taha; Wilson Clyde
- CS Division of Life Sciences, Infection and Immunity Group, King's College London, UK.. alan.ebringer@kcl.ac.uk
- SO SCANDINAVIAN JOURNAL OF RHEUMATOLOGY, (2003) 32 (1) 2-11. Ref: 117 Journal code: 0321213. ISSN: 0300-9742.
- CY Norway
- DT Journal; Article; (JOURNAL ARTICLE)
 General Review; (REVIEW)
 (REVIEW, ACADEMIC)
- LA English
- FS Priority Journals
- EM 200303
- ED Entered STN: 20030316

 Last Updated on STN: 20030326

 Entered Medline: 20030325
- AB Rheumatoid arthritis (RA) is a chronic disease, affecting women more than men, especially in those possessing the "shared epitope" (EQK/RRAA) amino

acid sequences present in HLA-DR1/4 molecules. Proteus mirabilis carries sequences showing molecular mimicry to the "shared epitope" and to type XI collagen of hyaline cartilage. Elevated levels of antibodies to P. mirabilis have been reported from 14 different countries involving 1375 RA patients and the microbe has been isolated from urine cultures of such patients. Our working hypothesis is that the disease develops as a result of repeated episodes of Proteus upper urinary tract infections. Prospective studies involving the trial of anti-Proteus measures in RA patients should be evaluated in the management of this disease. Antibiotics, high fluid intake, and fruit extracts, such as cranberry juice, have all been found to be effective in the treatment of urinary tract infections. Such measures could be used as possible additional adjuncts to the standard therapy with NSAIDs and DMARDs.

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=> s 11 and 12 and 13 and 14
L10
            77 L1 AND L2 AND L3 AND L4
=> s 110 and 15
L11
            72 L10 AND L5
=> s 111 and 16
L12
            70 L11 AND L6
=> s 18 and 112
L13
             0 L8 AND L12
=> s 19 and 112
L14
             0 L9 AND L12
=> s (creutzfeld-jacob disease or CJD)
          1585 (CREUTZFELD-JACOB DISEASE OR CJD)
=> s 112 and 115
L16
             1 L12 AND L15
=> d 116 bib ab
     ANSWER 1 OF 1 USPATFULL
L16
       2003:146305 USPATFULL
AN
       97 human secreted proteins
TI
IN
       Ruben, Steven M., Olney, MD, UNITED STATES
       Florence, Kimberly A., Rockville, MD, UNITED STATES
       Ni, Jian, Germantown, MD, UNITED STATES
       Rosen, Craig A., Laytonsville, MD, UNITED STATES
       Carter, Kenneth C., North Potomac, MD, UNITED STATES
       Moore, Paul A., Germantown, MD, UNITED STATES
       Olsen, Henrik S., Gaithersburg, MD, UNITED STATES
       Shi, Yanggu, Gaithersburg, MD, UNITED STATES
       Young, Paul E., Gaithersburg, MD, UNITED STATES
       Wei, Ying-Fei, Berkeley, CA, UNITED STATES
       Brewer, Laurie A., St. Paul, MN, UNITED STATES
       Soppet, Daniel R., Centreville, VA, UNITED STATES
       LaFleur, David W., Washington, DC, UNITED STATES
       Endress, Gregory A., Florence, MA, UNITED STATES
       Ebner, Reinhard, Gaithersburg, MD, UNITED STATES
       Birse, Charles E., North Potomac, MD, UNITED STATES
PΙ
       US 2003100051
                          A1
                               20030529
ΑI
       US 2001-948783
                          Α1
                               20010910 (9)
       Continuation-in-part of Ser. No. US 2001-892877, filed on 28 Jun 2001,
RLI
       PENDING Continuation of Ser. No. US 1999-437658, filed on 10 Nov 1999,
      ABANDONED Continuation-in-part of Ser. No. WO 1999-US9847, filed on 6
      May 1999, UNKNOWN
PRAI
      US 2000-231846P
                           20000911 (60)
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19980512 (60)
       US 1998-85094P
                            19980512 (60)
       US 1998-85105P
                            19980512 (60)
       US 1998-85180P
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       US 1998-85927P
                            19980518 (60)
       US 1998-85906P
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       US 1998-85921P
                            19980518 (60)
       US 1998-85925P
                            19980518 (60)
       US 1998-85928P
                            19980518 (60)
       Utility
DT
FS
       APPLICATION
LREP
       HUMAN GENOME SCIENCES INC, 9410 KEY WEST AVENUE, ROCKVILLE, MD, 20850
       Number of Claims: 23
CLMN
ECL
       Exemplary Claim: 1
       6 Drawing Page(s)
DRWN
LN.CNT 32767
AB
       The present invention relates to novel human secreted proteins and
       isolated nucleic acids containing the coding regions of the genes
       encoding such proteins. Also provided are vectors, host cells,
       antibodies, and recombinant methods for producing human secreted
       proteins. The invention further relates to diagnostic and therapeutic
       methods useful for diagnosing and treating diseases, disorders, and/or
       conditions related to these novel human secreted proteins.
=> d l12 1-10 bib ab
     ANSWER 1 OF 70 USPATFULL
L12
ΑN
       2003:165984 USPATFULL
ΤI
       25 human secreted proteins
IN
       Rosen, Craig A., Laytonsville, MD, UNITED STATES
       Ni, Jian, Germantown, MD, UNITED STATES
       Florence, Kimberly A., Rockville, MD, UNITED STATES
       Fiscella, Michele, Bethesda, MD, UNITED STATES
       Wei, Ping, Brookeville, MD, UNITED STATES
       Baker, Kevin P., Darnestown, MD, UNITED STATES
       Birse, Charles E., North Potomac, MD, UNITED STATES
       Young, Paul E., Gaithersburg, MD, UNITED STATES
       Komatsoulis, George A., Silver Spring, MD, UNITED STATES
       Moore, Paul A., Germantown, MD, UNITED STATES
       Soppet, Daniel R., Centreville, VA, UNITED STATES
PΑ
       Human Genome Sciences, Inc., Rockville, MD, UNITED STATES, 20850 (U.S.
       corporation)
PΙ
       US 2003113840
                          A1
                               20030619
ΑI
       US 2002-60255
                          Α1
                               20020201 (10)
RLI
       Continuation of Ser. No. US 2001-781417, filed on 13 Feb 2001, ABANDONED
       Continuation-in-part of Ser. No. WO 2000-US22325, filed on 16 Aug 2000,
       PENDING
       US 1999-149182P
PRAI
                           19990817 (60)
DT
       Utility
FS
       APPLICATION
LREP
       HUMAN GENOME SCIENCES INC, 9410 KEY WEST AVENUE, ROCKVILLE, MD, 20850
CLMN
       Number of Claims: 23
ECL
       Exemplary Claim: 1
DRWN
       No Drawings
LN.CNT 20339
AB
       The present invention relates to novel human secreted proteins and
       isolated nucleic acids containing the coding regions of the genes
       encoding such proteins. Also provided are vectors, host cells,
```

antibodies, and recombinant methods for producing human secreted

US 1998-85093P

proteins. The invention further relates to diagnostic and therapeutic methods useful for diagnosing and treating diseases, disorders, and/or conditions related to these novel human secreted proteins.

L12 ANSWER 2 OF 70 USPATFULL

```
AN
       2003:160075 USPATFULL
ΤI
       Colon and colon cancer associated polynucleotides and polypeptides
IN
       Ruben, Steven M., Olney, MD, UNITED STATES
       Barash, Steve C., Rockville, MD, UNITED STATES
       Birse, Charles E., North Potomac, MD, UNITED STATES
       Rosen, Craig A., Laytonsville, MD, UNITED STATES
PΑ
       Human Genome Sciences, Inc., Rockville, MD, UNITED STATES, 20850 (U.S.
       corporation)
PΙ
       US 2003109690
                          Α1
                                20030612
ΑI
       US 2002-106698
                          A1
                                20020327 (10)
RLI
       Continuation-in-part of Ser. No. WO 2000-US26524, filed on 28 Sep 2000,
       PENDING
PRAI
       US 1999-157137P
                            19990929 (60)
       US 1999-163280P
                           19991103 (60)
DT
       Utility
FS
       APPLICATION
LREP
       HUMAN GENOME SCIENCES INC, 9410 KEY WEST AVENUE, ROCKVILLE, MD, 20850
CLMN
       Number of Claims: 24
ECL
       Exemplary Claim: 1
DRWN
       No Drawings
LN.CNT 17981
       The present invention relates to novel colon or colon cancer related
       polynucleotides and the polypeptides encoded by these polynucleotides
       herein collectively known as "colon or colon cancer antigens," and the
       use of such colon or colon cancer antigens for detecting disorders of
       the colon, particularly the presence of colon cancer and colon cancer
       metastases. More specifically, isolated colon or colon cancer associated
       nucleic acid molecules are provided encoding novel colon or colon cancer
       associated polypeptides. Novel colon or colon cancer polypeptides and
       antibodies that bind to these polypeptides are provided. Also
       provided are vectors, host cells, and recombinant and synthetic methods
       for producing human colon or colon cancer associated polynucleotides
       and/or polypeptides. The invention further relates to diagnostic and
       therapeutic methods useful for diagnosing, treating, preventing and/or
       prognosing disorders related to the colon, including colon cancer, and
       therapeutic methods for treating such disorders. The invention further
       relates to screening methods for identifying agonists and antagonists of
       polynucleotides and polypeptides of the invention. The present invention
       further relates to methods and/or compositions for inhibiting the
       production and function of the polypeptides of the present invention.
     ANSWER 3 OF 70 USPATFULL
L12
AN
       2003:159294 USPATFULL
TI
       Nucleic acids, proteins, and antibodies
IN
       Rosen, Craig A., Laytonsville, MD, UNITED STATES
       Ruben, Steven M., Olney, MD, UNITED STATES
       Barash, Steven C., Rockville, MD, UNITED STATES
PA
       Human Genome Sciences, Inc., Rockville, MD, UNITED STATES, 20850 (U.S.
       corporation)
ΡI
       US 2003108907
                          Α1
                               20030612
AΙ
       US 2002-205428
                          Α1
                               20020726 (10)
RLI
       Continuation of Ser. No. US 2001-764892, filed on 17 Jan 2001, PENDING
PRAI
      US 2000-179065P
                          20000131 (60)
      US 2000-180628P
                           20000204 (60)
      US 2000-214886P
                           20000628 (60)
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DT Utility

FS APPLICATION

LREP HUMAN GENOME SCIENCES INC, 9410 KEY WEST AVENUE, ROCKVILLE, MD, 20850

CLMN Number of Claims: 24 ECL Exemplary Claim: 1

DRWN No Drawings

LN.CNT 25967

AB The present invention relates to novel ovarian and/or breast cancer related polynucleotides and the polypeptides encoded by these polynucleotides herein collectively known as "ovarian and/or breast cancer antigens," and the use of such ovarian and/or breast cancer antigens for detecting disorders of the ovaries and/or breast, particularly the presence of ovarian and/or breast cancer and ovarian and/or breast cancer metastases. More specifically, isolated ovarian and/or breast cancer associated nucleic acid molecules are provided encoding novel ovarian and/or breast cancer associated polypeptides. Novel ovarian and/or breast cancer polypeptides and antibodies that bind to these polypeptides are provided. Also provided are vectors, host cells, and recombinant and synthetic methods for producing human ovarian and/or breast cancer associated polynucleotides and/or polypeptides. The invention further relates to diagnostic and therapeutic methods useful for diagnosing, treating, preventing and/or prognosing disorders related to the ovaries and/or breast, including ovarian and/or breast cancer, and therapeutic methods for treating such disorders. The invention further relates to screening methods for identifying agonists and antagonists of polynucleotides and polypeptides of the invention. The present invention further relates to methods and/or compositions for inhibiting the production and function of the polypeptides of the present invention.

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       Ruben, Steven M., Olney, MD, UNITED STATES
       Florence, Kimberly A., Rockville, MD, UNITED STATES
       Ni, Jian, Germantown, MD, UNITED STATES
       Rosen, Craig A., Laytonsville, MD, UNITED STATES
       Carter, Kenneth C., North Potomac, MD, UNITED STATES
       Moore, Paul A., Germantown, MD, UNITED STATES
       Olsen, Henrik S., Gaithersburg, MD, UNITED STATES
       Shi, Yanggu, Gaithersburg, MD, UNITED STATES
       Young, Paul E., Gaithersburg, MD, UNITED STATES
       Wei, Ying-Fei, Berkeley, CA, UNITED STATES
       Brewer, Laurie A., St. Paul, MN, UNITED STATES
       Soppet, Daniel R., Centreville, VA, UNITED STATES
       LaFleur, David W., Washington, DC, UNITED STATES
       Endress, Gregory A., Florence, MA, UNITED STATES
       Ebner, Reinhard, Gaithersburg, MD, UNITED STATES
       Birse, Charles E., North Potomac, MD, UNITED STATES
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CLMN
       Number of Claims: 23
ECL
       Exemplary Claim: 1
DRWN
       6 Drawing Page(s)
LN.CNT 32767
       The present invention relates to novel human secreted proteins and
       isolated nucleic acids containing the coding regions of the genes
       encoding such proteins. Also provided are vectors, host cells,
       antibodies, and recombinant methods for producing human secreted
       proteins. The invention further relates to diagnostic and therapeutic
       methods useful for diagnosing and treating diseases, disorders, and/or
       conditions related to these novel human secreted proteins.
L12 ANSWER 5 OF 70 USPATFULL
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       Nucleic acids, proteins, and antibodies
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       Rosen, Craig A., Laytonsville, MD, UNITED STATES
       Ruben, Steven M., Olney, MD, UNITED STATES
       Barash, Steven C., Rockville, MD, UNITED STATES
       Human Genome Sciences, Inc., Rockville, MD, UNITED STATES, 20850 (U.S.
PA
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       Number of Claims: 24
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LN.CNT 20722
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       The present invention relates to novel proteins. More specifically,
       isolated nucleic acid molecules are provided encoding novel
       polypeptides. Novel polypeptides and antibodies that bind to
       these polypeptides are provided. Also provided are vectors, host cells,
       and recombinant and synthetic methods for producing human
      polynucleotides and/or polypeptides, and antibodies. The
       invention further relates to diagnostic and therapeutic methods useful
       for diagnosing, treating, preventing and/or prognosing disorders related
      to these novel polypeptides. The invention further relates to screening
      methods for identifying agonists and antagonists of polynucleotides and
      polypeptides of the invention. The present invention further relates to
      methods and/or compositions for inhibiting or enhancing the production
      and function of the polypeptides of the present invention.
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DT

FS

LREP

CLMN

ECL

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       Barash, Steven C., Rockville, MD, UNITED STATES
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       corporation)
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CLMN
       Number of Claims: 24
ECL
       Exemplary Claim: 1
DRWN
       No Drawings
LN.CNT 21689
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AB
       The present invention relates to novel proteins. More specifically,
       isolated nucleic acid molecules are provided encoding novel
       polypeptides. Novel polypeptides and antibodies that bind to
       these polypeptides are provided. Also provided are vectors, host cells,
       and recombinant and synthetic methods for producing human
       polynucleotides and/or polypeptides, and antibodies. The
       invention further relates to diagnostic and therapeutic methods useful
       for diagnosing, treating, preventing and/or prognosing disorders related
       to these novel polypeptides. The invention further relates to screening
       methods for identifying agonists and antagonists of polynucleotides and
       polypeptides of the invention. The present invention further relates to
       methods and/or compositions for inhibiting or enhancing the production
       and function of the polypeptides of the present invention.
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       Rosen, Craig A., Laytonsville, MD, UNITED STATES
       Ruben, Steven M., Olney, MD, UNITED STATES
       Barash, Steven C., Rockville, MD, UNITED STATES
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       Human Genome Sciences, Inc., Rockville, MD, UNITED STATES (U.S.
       corporation)
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APPLICATION
HUMAN GENOME SCIENCES INC, 9410 KEY WEST AVENUE, ROCKVILLE, MD, 20850
Number of Claims: 24
Exemplary Claim: 1
No Drawings
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DT

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LREP CLMN

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LN.CNT 23217

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

The present invention relates to novel proteins. More specifically, isolated nucleic acid molecules are provided encoding novel polypeptides. Novel polypeptides and antibodies that bind to these polypeptides are provided. Also provided are vectors, host cells, and recombinant and synthetic methods for producing human polynucleotides and/or polypeptides, and antibodies. The invention further relates to diagnostic and therapeutic methods useful for diagnosing, treating, preventing and/or prognosing disorders related to these novel polypeptides. The invention further relates to screening methods for identifying agonists and antagonists of polynucleotides and polypeptides of the invention. The present invention further relates to methods and/or compositions for inhibiting or enhancing the production and function of the polypeptides of the present invention.

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ANSWER 8 OF 70 USPATFULL
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       2003:120277 USPATFULL
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       Barash, Steven C., Rockville, MD, UNITED STATES
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LREP
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CLMN
       Number of Claims: 24
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       Exemplary Claim: 1
       No Drawings
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       isolated nucleic acid molecules are provided encoding novel
       polypeptides. Novel polypeptides and antibodies that bind to
       these polypeptides are provided. Also provided are vectors, host cells,
       and recombinant and synthetic methods for producing human
       polynucleotides and/or polypeptides, and antibodies. The
       invention further relates to diagnostic and therapeutic methods useful
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       to these novel polypeptides. The invention further relates to screening
       methods for identifying agonists and antagonists of polynucleotides and
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L12 ANSWER 9 OF 70 USPATFULL
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       2003:120200 USPATFULL
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       Rosen, Craig A., Laytonsville, MD, UNITED STATES
       Ruben, Steven M., Olney, MD, UNITED STATES
       Barash, Steven C., Rockville, MD, UNITED STATES
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A1

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       HUMAN GENOME SCIENCES INC, 9410 KEY WEST AVENUE, ROCKVILLE, MD, 20850
LREP
CLMN
       Number of Claims: 24
ECL
       Exemplary Claim: 1
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       No Drawings
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CAS INDEXING IS AVAILABLE FOR THIS PATENT.
       The present invention relates to novel proteins. More specifically,
       isolated nucleic acid molecules are provided encoding novel
       polypeptides. Novel polypeptides and antibodies that bind to
       these polypeptides are provided. Also provided are vectors, host cells,
       and recombinant and synthetic methods for producing human
       polynucleotides and/or polypeptides, and antibodies. The
       invention further relates to diagnostic and therapeutic methods useful
       for diagnosing, treating, preventing and/or prognosing disorders related
       to these novel polypeptides. The invention further relates to screening
       methods for identifying agonists and antagonists of polynucleotides and
       polypeptides of the invention. The present invention further relates to
       methods and/or compositions for inhibiting or enhancing the production
       and function of the polypeptides of the present invention.
L12
     ANSWER 10 OF 70 USPATFULL
       2003:113075 USPATFULL
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       Barash, Steven C., Rockville, MD, UNITED STATES
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       Utility
       APPLICATION
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       Number of Claims: 24
       Exemplary Claim: 1
       No Drawings
LN.CNT 59131
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
       The present invention relates to novel reproductive system related
       polynucleotides and the polypeptides encoded by these polynucleotides
       herein collectively known as "reproductive system related antigens," and
       the use of such reproductive system related antigens for detecting
      disorders of the reproductive system, particularly the presence of
      cancers and cancer metastases. More specifically, isolated reproductive
      system associated nucleic acid molecules are provided encoding novel
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reproductive system associated polypeptides. Novel reproductive system

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AB

related polypeptides and antibodies that bind to these polypeptides are provided. Also provided are vectors, host cells, and recombinant and synthetic methods for producing human reproductive system associated polynucleotides and/or polypeptides. The invention further relates to diagnostic and therapeutic methods useful for diagnosing, treating, preventing and/or prognosing disorders related to the reproductive system, including reproductive system cancers, and therapeutic methods for treating such disorders. The invention further relates to screening methods for identifying agonists and antagonists of polynucleotides and polypeptides of the invention. The present invention further relates to methods and/or compositions for inhibiting the production and function of the polypeptides of the present invention.